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Serial No. 09/853,033

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A transgenic mouse, wherein at least one cell of said mouse comprises at least:

- (i) one fusion protein comprising sequentially:
  - a Cre recombinase protein;
  - a hinge region of at least 15 amino acids;
  - a polypeptide comprising the ligand-binding domain of the human nuclear estrogen receptor, or of a vertebrate nuclear estrogen receptor, said polypeptide exhibiting at least one mutation relative to the wild-type form of said ligand-binding domains,

said fusion protein having a negligible, or even zero, recombinase activity in the presence of a natural ligand and a recombinase activity induced by small quantities of synthetic ligand endowed with antiestrogenic activity;

- (ii) one or more gene or intergenic DNA sequences of interest naturally belonging to said genome of said mouse, said DNA sequence(s) of interest being flanked by one or more recognition sites of said Cre recombinase protein, and being located in one or more of the chromosomes of the genome of said cell;

wherein the recombinase targets and specifically inactivates said DNA sequences of interest in the presence of synthetic ligand.

2. (Cancelled)

3. (Cancelled)

4. (Previously Presented) Transgenic mouse according to Claim 1, wherein said sites of recognition specific for said Cre recombinase protein comprise the sequences Lox P.

5. (Previously Presented) Transgenic mouse according to Claim 1, wherein said hinge region comprises all or part of the D hinge region of a nuclear estrogen receptor.